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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/829,438
Filing Date: April 20, 2004
Appellant(s): GAST ET AL.

Jack H. McKinney
Reg. No. 45,685
<u>For Appellant</u>

EXAMINER'S ANSWER

This is in response to the appeal brief filed 7/23/06 appealing from the Office action mailed 5/15/08.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

3,679,876	Faith et al.	07-1972
6,335,084	Biegelsen et al.	01-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6, 8, 9, 11 and 18 are rejected under 35 U.S.C. 102 (b) as being anticipated by Faith et al. (3,679,876).

As for claim 1, Faith et al. teaches in Fig. 3 an apparatus comprising: a tray, 22, for holding a media stack, 11, the media stack having opposing faces, seen where marks, 12, are located, joined by sides, a pattern, 13, being formed on at least one of the sides, as seen in Fig. 1, each face being a face of a media sheet, Col. 1 lines 57-61, the pattern, 13, including a plurality of sub-patterns, pulse on each card, each sub-pattern being formed on a different subset of sheets making up the total pattern, 13, of the media stack, 11, Col. 1 lines 63-70, and encoding imaging data and a reference associated with the imaging data for the subset of sheets on which the sub-pattern is formed, where the reference is a card's number within the stack of cards, Col. 1 line 70 to Col. 2 line 15, which makes up a total expected number of sheets in that subset for the stack; a sensor, 24; a transport mechanism, 25-28, to move the tray, 22, past the sensor, 24, to scan the sub- patterns, pulses found on each card; and control logic

operable to communicate with the sensor, 24, to decipher the imaging data from the sub-patterns for each subset of sheets in the media stack, as described in Fig. 4.

As for claim 2, Faith et al. teaches an apparatus in Fig. 3, further comprising a housing, 29, and wherein the sensor, 24, is coupled to the housing, 29, such that the sensor, 24, is held stationary relative to the housing, 29, as indicated in Fig. 3; and the transport mechanism, 25-28, is coupled to the housing, 29, and the tray, 22, as seen in Fig. 3.

As for claim 6, Faith et al. teaches in Fig. 3 an apparatus comprising: a tray, 22, for holding a media stack, 11, the media stack having opposing faces, seen where marks, 12, are located, joined by sides, a pattern, 13, being formed on at least one of the sides, as seen in Fig. 1, each face being a face of a media sheet, Col. 1 lines 57-61, the pattern, 13, including a plurality of sub-patterns, pulse on each card, each sub-pattern being formed on a different subset of sheets making up the total pattern, 13, of the media stack, 11, Col. 1 lines 63-70, and encoding imaging data and a reference associated with the imaging data for the subset of sheets on which the sub-pattern is formed, where the reference is a card's number within the stack of cards, Col. 1 line 70 to Col. 2 line 15, which makes up a total expected number of sheets in that subset for the stack; means, 25-28, to move the tray, 22, between a first loading position, Fig. 3, and a second position, defined by where tongue, 27, makes contact with a limit switch, 33; means, 24, for scanning the sub- patterns, pulses found on each card, as the tray is moved between the first position and second position; and means, Fig. 4, for decipher

the imaging data from the sub-patterns for each subset of sheets in the media stack, as described in Fig. 4.

As for claim 8, Faith et al. teaches an apparatus in Fig. 3, wherein the means, 24, for scanning include means, 25-28, for scanning the side of the media stack, as the tray, 22, is moved between the first position and the second position, Fig. 3.

As for claim 9, Faith et al. teaches in Fig. 3 a data identification system comprising: a tray, 22, for holding a media stack, 11, the media stack having opposing faces, seen where marks, 12, are located, joined by sides, a pattern, 13, being formed on at least one of the sides, as seen in Fig. 1, each face being a face of a media sheet, Col. 1 lines 57-61, the pattern, 13, including a plurality of sub-patterns, pulse on each card, each sub-pattern being formed on a different subset of sheets making up the total pattern, 13, of the media stack, 11, Col. 1 lines 63-70, and encoding imaging data and a reference associated with the imaging data for the subset of sheets on which the sub-pattern is formed, where the reference is a card's number within the stack of cards, Col. 1 line 70 to Col. 2 line 15, which makes up a total expected number of sheets in that subset for the stack; a transport mechanism, 25-28, operable to move the tray, 22, between a first loading position, Fig. 3, and a second position, defined by where tongue, 27, makes contact with a limit switch, 33; a sensor, 24,positioned to scan the sub-patterns, pulses found on each card, as the tray is move between the first position and second position; and logic coupled the sensor, Fig. 4, operable to decipher the imaging data from the sub-patterns for each subset of sheets in the media stack, as described in Fig. 4.

As for claim 11, Faith et al. teaches the data identification system, Fig. 3, further comprising a support, 29, holding the sensor, 24, stationary relative to the motion of the tray, 22, caused by the transport mechanism, 25-28.

As for claim 18, Faith et al. teaches the data identification system, Fig. 3, wherein the imaging data for each sub-pattern, pulses, includes an expected number of sheets of media in a corresponding subset of sheets making up the stack, 11, on which the sub-pattern is imprinted, Col. 1 line 70 to Col. 2 line 15, and the control logic is operable to decipher the sub-patterns to identify the expected number of sheets in the media stack, as described by Fig. 4.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-7, 9, 10, 12-16, 19-23, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biegelsen et al. (6,335,084) in view Faith et al. (3,679,876).

As for claims 3-7, 9, 10, 16, and 19, Biegelsen et al. teaches in Fig. 8, an imaging device, 110, comprising: a print engine operable to form an image on a sheet of media, Col. 4 lines 59-63; a media source, implicitly taught in Col. 3 lines 36-46, operable to supply a media stack, Fig. 7, the media source including: a tray, 30A, for holding the media stack, Fig. 7, the media stack, Fig. 7, having opposing faces joined by

sides, a pattern, 20, being formed on at least one of the sides, 18b, each face being a face of a media sheet, the pattern, 20, including a plurality of sub-patterns, Col. 4 lines 1-8, each sub-pattern being formed on a different subset of sheets in the media stack, Col. 4 lines 44-49, and encoding imaging data or a reference associated with the imaging data for the subset of sheets on which the sub- pattern is formed, Col. 4 lines 10-16, the imaging data for at least one subset of sheets identifying an expected number of sheets in that subset implicitly taught depending on how many times a specific pattern is sensed; a sensor, 24, movably positioned to scan the sub-patterns as the sensor moves from one position to a second position; a transfer mechanism, feed rollers, indirectly taught, operable to transfer sheets of media from the media source on tray, 30A, to the print engine in a second position, as to be printed thereon; control logic found in the processor, 28, in communication with the media source, the print engine, and the transfer mechanism, Col. 5 lines 24-28, the control logic operable to decipher the imaging data from the sub-patterns that form pattern, 20, for each subset of sheets in the media stack, Fig. 7, and to control the operation of the print engine with respect to each subset of sheets according to the imaging data for that subset of sheets, Col. 6 lines 29-44.

As described above in the rejection of 3-7, 9, 10, 12-16, 19-23 and 25, Biegelsen et al. teaches moving a sensor, 24, relative to a media tray, 30A, not moving the tray from one position to the next as a stationary sensor reads the pattern as the media stack is moves past the sensor.

However, Faith et al. teaches in Fig. 3, a known transport mechanism, 25-28, operable to move the tray, 22, between a first loading position, Fig. 3, and a second position, defined by where tongue, 27, makes contact with a limit switch, 33, as a stationary sensor, 24, is positioned to scan a pattern of pulses found a stack of media, as the tray is move from the first position to the second position. Because both Biegelsen et al. and Faith et al. teach moving the recited structure relative to one another for the purpose of scanning patterns found on the side of a media stack, it would have been obvious to one of ordinary skill in the art at the time of invention to substitute one moving mechanism with another in Biegelsen et al to achieve the predictable result of scanning the pattern found on the side of the media stack as the stack is moved to a second feeding position for printing.

As for claim 12 Biegelsen et al. teaches in Fig. 8 the data identification system wherein each sub-pattern of the pattern, 20, encodes a reference associated with a characteristic of that sheet and the control logic is operable to retrieve, for each reference, an entry in a look-up table associated with the reference, indirectly taught in the processor, 28, the entry including the imaging data for a given sub-pattern, as to how the imaging system is to perform depending of the reference, Col. 6 lines 29-44.

As for claim 13 Biegelsen et al. teaches in Fig. 8 the data identification system wherein the imaging data for a given sub-pattern includes parameter settings for a corresponding subset of sheets, Col. 4 lines 1-8, and the control logic is operable to decipher the given sub-pattern to identify the parameter settings, Col. 6 lines 29-44.

As for claim 14 Biegelsen et al. teaches in Fig. 8 the data identification system wherein the imaging data for a given sub-pattern includes a media type for a corresponding subset of sheets, Col. 4 lines 1-8, and the control logic is operable to decipher the given sub-pattern to identify the media type, Col. 6 lines 7-44.

As for claim 15 Biegelsen et al. teaches in Fig. 8 the data identification system wherein the control logic found in the processor, 28, is operable to select parameter settings for the corresponding subset of sheets according to the media type, Col. 6 liens 39-44.

As for claim 21 Biegelsen et al. teaches in Fig. 8, an imaging device, 110, further comprising a user interface, displayed on 32, in communication with the control logic and wherein the control logic is operable to cause the user interface to generate a display corresponding, at least indirectly, to the imaging data for one or more of the subsets of sheets, Col. 5 lines 19-25.

As for claim 22 Biegelsen et al. teaches in Fig. 8, an imaging device, 110, wherein the control logic coupled with the sensor is operable to cause the user interface to generate a display on the display, 32, that includes user selectable options via input device, 26, corresponding, at least indirectly, to the imaging data for one or more of the subsets of sheets, Col. 45 lines 9-25.

As for claim 23 Biegelsen et al. teaches in Fig. 8, an imaging device, 110, wherein the imaging data for a given sub-pattern forming pattern, 20, includes imaging parameter settings, Col. 4 lines 10-14, the imaging device further comprising a user interface in communication with the control logic and capable of displaying information

to a user displayed on 32 and wherein the control logic is operable to cause the user interface to display information corresponding to the imaging parameter settings the subset of sheets on which the given sub-pattern is imprinted, Col. 5 lines 19-25.

As for claim 25 Biegelsen et al. teaches in Fig. 8, an imaging device, 110, wherein the imaging data for each sub-pattern includes an expected number of sheets in a corresponding subset of sheets implicitly taught depending on how many times a specific pattern is sensed; the imaging device further comprising a user interface seen in the display, 32, in communication with the control logic and wherein the control logic is further operable to cause the user interface to generate a display on 32, corresponding, at least indirectly, to the expected number of sheets in the media stack.

As for claims 26 and 27, Biegelsen et al. teaches an imaging device, 210, in Fig. 10, comprising: a print engine operable to form an image on a sheet of media, Col. 4 lines 59-63; a first and second media source, seen in Fig. 10, operable to supply a first and second media stack, Fig. 7, the first and second media sources including: a first and second trays, similar to 30A, for holding the first and second media stack, Fig. 7, the first and second media stacks, Fig. 7, having opposing faces joined by sides, a first and second pattern, 20, being formed on at least one of the sides, 18b, each face being a face of a media sheet, the first and second pattern, 20, including a plurality of first and second sub-patterns, Col. 4 lines 1-8, each fist and second sub-pattern being formed on a different subset of sheets in the first and second media stacks, Col. 4 lines 44-49, and encoding imaging data or a reference associated with the imaging data for the subset of sheets on which the first and second sub-patterns are formed, Col. 4 lines 10-16, the

imaging data for at least one subset of sheets identifying an expected number of sheets in that subset implicitly taught depending on how many times a specific pattern is sensed consecutively; a first and second sensor, 24a and 24b, movably positioned to scan the first and second sub-patterns as the first and second sensors, 24a-b, move from one position to a second position; a first and second transfer mechanism, feed rollers, indirectly taught, operable to transfer sheets of media from the fist and second media sources, to the print engine in a second position, as to be printed thereon; control logic found in the processor, 28, in communication with the first and second media sources Fig. 10, the print engine, and the transfer mechanism, Col. 5 lines 24-28, the control logic operable to decipher the first and second sub-patterns over the pattern, 20, to identify imaging data for each of the first subsets of sheets in the first media stack and second media data for each of the second subsets of sheets in the second media stack and to control the operation of the transfer mechanism and to control the operation of the print engine so that the first imaging data for a given one of the subsets of sheets in the first media stack is used when a media sheet from that given subset of sheets from the first media stack is transferred from the first media source and the second imaging data for a given one of the subsets of sheets in the second media stack is used when a media sheet from that given subset of sheets from the second media stack is transferred from the second media source, Col. 5 line 60 to Col. 6 line 27.

As described above in the rejection of claims 26 and 27, Biegelsen et al. teaches moving the sensors, 24a-b, relative to a media trays, 30A, not moving the tray from one

position to the next as a stationary sensor reads the pattern as the media stack is moved past the sensor.

However, Faith et al. teaches in Fig. 3, a known transport mechanism, 25-28, operable to move the tray, 22, between a first loading position, Fig. 3, and a second position, defined by where tongue, 27, makes contact with a limit switch, 33, as a stationary sensor, 24, is positioned to scan a pattern of pulses found a stack of media, as the tray is move from the first position to the second position. Because both Biegelsen et al. and Faith et al. teach moving the recited structure relative to one another for the purpose of scanning patterns found on the side of a media stack, it would have been obvious to one of ordinary skill in the art at the time of invention to substitute one moving mechanism with another in Biegelsen et al to achieve the predictable result of scanning the pattern found on the side of the media stack as the stack is moved to a second feeding position for printing.

As for claim 27 Biegelsen et al. teaches in Fig. 10, an imaging device, 210, further comprising a user interface, displayed on 32, in communication with the control logic and wherein the control logic is operable to cause the user interface to generate a display corresponding, at least indirectly, to the imaging data for the subsets of sheets, Col. 5 lines 19-25, in the first and second stacks.

(10) Response to Argument

In response to appellant's arguments of claims 1, 6 and 9, specifically how Faith et al. mentions nothing of a sub-pattern formed on a subset of cards where those sub-patterns are common to a subset of cards, the examiner respectfully disagrees.

Looking at Fig. 1 of Faith et al., any group of sheets within the stack can be defined as a subset of cards, and within that subset of cards defined, the pattern, 13, is made of common magnetic pulse that makes up a plurality of sub-patterns in that subset of cards. Said differently, defining cards 1-5 as group I, and cards 6-10 as group II, each subset of cards have a plurality of sub-patterns, magnetic pulses, containing coded information making up an overall pattern, 13.

Regarding encoded imaging data or a reference associated with the image data within the pattern, the examiner would like to point out that the pattern is not part of the apparatus, but rather a part of the sheets used in the apparatus, and had been treated as intended use. As recited, the control logic responsible for deciphering the pattern does not tie in with what the deciphered pattern does to the apparatus itself, but rather simply states the sensor senses a pattern, where, indirectly, a control unit deciphers that data. Under this interpretation, Faith et al. teaches a pattern sensed by a sensor, where the senor communicates with a control unit, and then the control unit deciphers the data within that subset of cards.

In response to appellant's arguments of claims 3, 6, 9, 19, and 26 specifically how Biegelsen et al. does not teach a sub-pattern being formed on a different subset of sheets that identifies an expected number of sheets in that subset, the examiner respectfully disagrees. Looking at Fig. 7 of Biegelsen et al., one can clearly see a stack of sheets, where one side of that stack contains an overall pattern. The pattern is made up of a sub-pattern being formed on a different subset of sheets. Said differently,

defining sheets 1-2 as group I, and sheets 3-4 as group II, it is clearly shown each different subset of sheets contain a plurality of sub-patterns unique to that subset.

Regarding the sub-pattern not containing an expected number of sheets in that subset of sheets, the examiner would like to point out that the pattern is not part of the apparatus, but rather a part of the sheets used in the apparatus, and has been treated as intended use. As recited, the control logic responsible for deciphering the pattern does not tie in with what the deciphered pattern does to the apparatus itself, but rather simply states the sensor senses a pattern, where, indirectly, a control unit deciphers that data. Under this interpretation, Biegelsen et al. teaches a pattern sensed by a sensor, where the senor communicates with a control unit, and then the control unit deciphers the data within that subset of sheets.

In response to appellant's arguments of claim 13, specifically how Biegelsen et al. does not teach a sub-pattern which contains parameter settings, the examiner respectfully disagrees. Again, the examiner would like to point out that the pattern is not part of the apparatus, but rather a part of the sheets used in the apparatus, and has been treated as intended use. As recited, the control logic responsible for deciphering the pattern does not tie in with what the deciphered pattern does to the apparatus itself, but rather simply states the sensor senses a pattern, where, indirectly, a control unit deciphers that data. Under this interpretation, Biegelsen et al. teaches a pattern sensed by a sensor, where the senor communicates with a control unit, and then the control unit deciphers the data within that subset of sheets.

In response to appellant's arguments of claims 21 and 27 specifically how Biegelsen et al. does not teach a user interface in communication with the control logic and wherein the control logic is operable to cause the user interface to generate a display corresponding, at least *indirectly*, to the imaging data for one or more of the subsets of sheets, the examiner respectfully disagrees. In col. 5 lines 22-24 and Fig. 8 of Biegelsen et al., teach a display, 32, in communications with the control logic that indicates to a user the selected media is not available, and as stated in claim 21, to at least *indirectly*, the sensor sensing the pattern and the control unit deciphering information/parameters based of that pattern.

Regarding the control logic, the examiner would like to point out that the pattern is not part of the apparatus, but rather a part of the sheets used in the apparatus, and has been treated as intended use. As recited, the control logic responsible for deciphering the pattern does not tie in with what the deciphered pattern does to the apparatus itself, but rather simply states the sensor senses a pattern, where, indirectly, a control unit deciphers that data. Under this interpretation, Biegelsen et al. teaches a pattern sensed by a sensor, where the senor communicates with a control unit, and then the control unit deciphers the data within that subset of sheets. Where the deciphered data is then displayed to the user as read in col. 5 lines 22-24.

In response to appellant's arguments of claims 22 and 23 specifically how Biegelsen et al. does not teach a user interface in communication with the control logic and wherein the control logic is operable to cause the user interface to generate a display that includes user selectable options corresponding, at least *indirectly,* to the

imaging data for one or more of the subsets of sheets, the examiner respectfully disagrees. In col. 5 lines 22-24 and Fig. 8 of Biegelsen et al., teach a display, 32, in communications with the control logic that indicates to a user the selected media is not available and provides via a user input section, 26, for making options corresponding, and as stated in claim 22, to at least *indirectly* the sensor sensing the pattern and the control unit deciphering information/parameters based of that pattern.

Regarding the control logic, the examiner would like to point out that the pattern is not part of the apparatus, but rather a part of the sheets used in the apparatus, and has been treated as intended use. As recited, the control logic responsible for deciphering the pattern does not tie in with what the deciphered pattern does to the apparatus itself, but rather simply states the sensor senses a pattern, where, indirectly, a control unit deciphers that data. Under this interpretation, Biegelsen et al. teaches a pattern sensed by a sensor, where the senor communicates with a control unit, and then the control unit deciphers the data within that subset of sheets. The deciphered data is then displayed to the user as read in col. 5 lines 22-24.

In response to appellant's arguments of claim 25 specifically how Biegelsen et al. does not teach a sub-pattern being formed on a different subset of sheets that identifies an expected number of sheets in that subset and a user interface in communication with the control logic and wherein the control logic is operable to cause the user interface to generate a display corresponding, at least *indirectly*, to the imaging data for one or more of the subsets of sheets, the examiner respectfully disagrees. Looking at Fig. 7 of Biegelsen et al., one can clearly see a stack of sheets, where one side of that stack

contains an overall pattern. The pattern is made up of a sub-pattern being formed on a different subset of sheets. Said differently, defining sheets 1-2 as group I, and sheets 3-4 as group II, it is clearly shown each different subset of sheets contain a plurality of sub-patterns unique to that subset.

In col. 5 lines 22-24 and Fig. 8 of Biegelsen et al., teach a display, 32, in communications with the control logic that indicates to a user the selected media is not available, and as stated in claim 25, to at least *indirectly*, the sensor sensing the pattern and the control unit deciphering information/parameters based of that pattern.

Regarding the sub-pattern not containing an expected number of sheets in that subset of sheets, the examiner would like to point out that the pattern is not part of the apparatus, but rather a part of the sheets used in the apparatus, and has been treated as intended use. As recited, the control logic responsible for deciphering the pattern does not tie in with what the deciphered pattern does to the apparatus itself, but rather simply states the sensor senses a pattern, where, indirectly, a control unit deciphers that data. Under this interpretation, Biegelsen et al. teaches a pattern sensed by a sensor, where the senor communicates with a control unit, and then the control unit deciphers the data within that subset of sheets. Where the deciphered data is then displayed to the user as read in col. 5 lines 22-24.

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(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Matthew Marini

Conferees:

Judy Nguyen

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